In the Claims

Claims are amended as follows:

1. (currently amended) A method of routing traffic in a label switched packet network in which label switched paths (LSPs) are installed between nodes of the network, the method comprising defining and installing partial routes in the network, each partial route comprising at least two ~~or more paths~~ LSPs with a pre-installed cross-connection in a node at each end of the at least two LSPs such that an end-to-end route across the network can be defined as the concatenation of two of said partial routes.

2. (original) A method as claimed in claim 1, wherein said network is partitioned into a plurality of autonomous system regions.

3. (original) A method as claimed in claim 2, wherein the partial routes are selected based on congestion measurements.

4. (currently amended) A method as claimed in claim 3, wherein said partial routes ~~comprise~~ include cross connections in label switching nodes.

5. (currently amended) A method as claimed in claim 5, wherein said ~~paths~~ LSPs and partial routes are installed via a common open policy service protocol.

6. (currently amended) A method of operating a multi-protocol label switched packet network, the method comprising partitioning the network by using constraint based routing to install label switched paths (LSPs) between nodes of the network; ~~and corresponding labels,~~ defining and installing partial routes

in the network, each partial route comprising at least two LSPs with a pre-installed cross-connection in a node at each end of the at least two LSPs; ~~and multiplexing sessions by applying cross connections~~ wherein a label stack installed at an edge of the network acts as a source route such that the pre-installed cross connections enable dynamic multiplexing of sessions into the LSPs at a higher label level than those of the LSPs.

7. (cancelled)

8. (currently amended) A method as claimed in claim [[7]] 6, wherein the partial routes are selected based on congestion measurements.

9. (currently amended) A method as claimed in claim 8, wherein said partial routes ~~comprise~~ include cross connections in label switching nodes.

10. (currently amended) A method as claimed in claim 9, wherein said ~~paths~~ LSPs and partial routes are installed via a common open policy service protocol.

11. (currently amended) A method as claimed in claim [[7]] 6, and embodied as software in machine readable form on a storage medium.

12. (currently amended) A method of signalling to provide routing in a multi-protocol label switched packet network, the method comprising; sending a path message from an end point to a first *virtual router*[[,]]; *determining a* first half path from the ~~end point to the~~ first virtual router across the network towards a second virtual router; forwarding an identity of said first half path to a the second virtual router~~,~~; determining a second half path across the network which together with the first half path defines a path across the network between the first and second virtual routers; *determining a routing*

vector for said path across the network; and returning information identifying said routing vector to the first virtual route, wherein each of said half paths comprises a partial route installed in the network, each partial route comprising at least two label switched paths (LSPs) with a pre-installed cross-connection in a node at each end of the at least two LSPs.

13. (currently amended) A method of signalling to establish an end to end path in a multi-protocol label switched packet network, the method comprising sending ~~path reservation requests as tunnelled resource reservation protocol (RSVP) messages between first and second virtual routers~~ a path message from an end point to a first virtual router; encapsulating the path message within a resource reservation protocol (RSVP) message and transmitting said message to a second virtual router; determining a second half path across the network towards the second virtual router; determining routing vector information for said second half path; communicating said vector information to the first virtual router; determining a first half path which together with the second half path defines a path across the network between the first and second virtual routers; wherein each of said half paths comprises a partial route installed in the network, each partial route comprising at least two label switched paths (LSPs) with a pre-installed cross-connection in a node at each end of the at least two LSPs.

14. (cancelled)

15. (currently amended) A method as claimed in claim ~~14~~ 13, wherein path information is carried within a RSVP policy element in said message.

16. (cancelled).

17. (currently amended) A label switched communications packet network in which label switched paths (LSPs) are installed between nodes of the network, the network including path selection means for defining and installing partial routes in the network, each partial route comprising at least two ~~or more paths~~ LSPs with a pre-installed cross-connection in a node at each end of the at least two LSPs such that an end-to-end route across the network can be defined as the concatenation of two of said partial routes.

18. (original) A packet network as claimed in claim 17, wherein said network is partitioned into a plurality of autonomous system regions.

19. (original) A packet network as claimed in claim 18, wherein the partial routes are selected based on congestion measurements.

20. (currently amended) A packet network as claimed in claim 19, wherein said partial routes ~~comprise~~ include cross connections in label switching nodes.

21. (currently amended) A packet network as claimed in claim 20, wherein said ~~paths~~ LSPs and partial routes are installed via a common open policy service protocol.

22. (original) A packet network as claimed in claim 21, and incorporating signalling means for sending path reservation requests as tunnelled resource reservation protocol (RSVP) messages between first and second virtual routers.

23. A virtual router embodied as software in machine readable form on a storage medium and arranged to route traffic in a packet network in which label switched paths are installed between nodes of the network, the software being arranged to define and install partial routes in the network, each partial

route comprising at least two ~~or more paths~~ LSPs with a pre-installed cross-connection in a node at each end of the at least two LSPs such that an end-to-end route across the network can be defined as the concatenation of two of said partial routes.